INTERACTIVE COMPUTER-AIDED DIAGNOSIS METHOD AND SYSTEM FOR ASSISTING DIAGNOSIS OF LUNG NODULES IN DIGITAL VOLUMETRIC MEDICAL IMAGES

ABSTRACT OF THE DISCLOSURE

A computer-assisted diagnosis method for assisting diagnosis of anatomical structures in a digital volumetric medical image of at least one lung includes identifying an anatomical structure of interest in the volumetric digital medical image. The anatomical structure of interest is automatically segmented, in real-time, in a predefined volume of interest (VOI). Quantitative measurements of the anatomical structure of interest are automatically computed, in real-time. A result of the segmenting step and a result of the computing step are displayed, in real-time. A likelihood that the anatomical structure of interest corresponds to a disease or an area warranting further investigation is estimating, in real-time, based on predefined criteria and the quantitative measurements. A warning is generated, in real-time, when the likelihood is above a predefined threshold.